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     FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 10:08:03 ON 09 OCT 2002
L2       162026 S (5! OR 6! OR 7! OR 8! OR 9! OR 100) (5A) (MER# OR NUCLEOTIDE#
L3         1771 S L2 AND (ARRAY# OR CHIP# OR MICROARRAY# OR BIOCHIP#)
L4        30770 S L2 AND (ARRAY# OR CHIP# OR MICROARRAY# OR BIOCHIP# OR SUPPORT
L5         1520 S L2 (9A) (ARRAY# OR CHIP# OR MICROARRAY# OR BIOCHIP# OR SUPPOR
L6          180 S L5 AND HYBRIDI?
L7           61 DUP REM L6 (119 DUPLICATES REMOVED)
L8         1123 S L2 (9A) (CHIP# OR MICROARRAY# OR BIOCHIP# OR SUPPORT# OR MEMB
L9          724 S L8 AND PY<1999
L10         223 S L2 (9A) (CHIP# OR MICROARRAY# OR BIOCHIP# OR DNA(W)ARRAY#)
L11         108 DUP REM L10 (115 DUPLICATES REMOVED)
L12          26 S L11 AND (DNA OR NUCLEIC OR OLIGO?)
L13          48 S L2 (9A) (ATTACH? OR BOUND OR IMMOBIL? OR LINK?) (4A) (MEMBRAN
L14          33 DUP REM L13 (15 DUPLICATES REMOVED)
L15        1401 S L2 (5A) (OLIGO# OR OLIGONUCLEOTIDE# OR PROBE#)
L16         108 S L15 (9A) (IMMOBIL? OR ATTACH? OR BOUND)
L17          20 DUP REM L16 (88 DUPLICATES REMOVED)
L18         709 DUP REM L15 (692 DUPLICATES REMOVED)
L19         694 S L18 NOT 96
L20          12 S L18 (9A) BLOT#
L21          85 S L2 (6A) SPOT?
L22          56 DUP REM L21 (29 DUPLICATES REMOVED)
L23          19 S L15 (9A) (LINK?)
L24          14 DUP REM L23 (5 DUPLICATES REMOVED)
L25         114 S LONG (9A) (OLIGO?) (9A) L2
L26          54 DUP REM L25 (60 DUPLICATES REMOVED)

     FILE 'USPATFULL' ENTERED AT 10:40:12 ON 09 OCT 2002
L27      409659 S L2
L28         556 S L27 (9A) (IMMOBIL? OR BOUND OR ATTACH? OR LINK?) (9A) (OLIGO?
L29          80 S L27 (5A) (IMMOBIL? OR BOUND OR ATTACH?) (5A) (CHIP# OR MEMBRA

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=> d 27, 28, 44, 65 bib ab kwic

L29 ANSWER 27 OF 80 USPATFULL
AN 2002:156998 USPATFULL
TI Compositions and methods for detecting and quantifying gene expression
IN Lowe, David G., Hillsborough, CA, UNITED STATES
Marsters, James C., JR., Oakland, CA, UNITED STATES
Robbie, Edward P., San Francisco, CA, UNITED STATES
Smith, Victoria, Burlingame, CA, UNITED STATES
PA GENENTECH, INC. (U.S. corporation)
PI US 2002081597 A1 20020627
AI US 2001-823648 A1 20010330 (9)
PRAI US 2000-193767P 20000331 (60)
DT Utility
FS APPLICATION
LREP GENENTECH, INC., 1 DNA WAY, SOUTH SAN FRANCISCO, CA, 94080
CLMN Number of Claims: 104
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2621
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for improving detection sensitivity in nucleic acid microarray analysis are disclosed, including methods of purifying nucleic acids, methods of synthesizing fluorescent DNA probes, methods of hybridization, and methods of activating a substrate for target molecule attachment are disclosed.
DETD [0182] Single stranded **DNA** molecules, such as chemically synthesized target **oligonucleotides** of approximately **50** to **100 nucleotides** in length were **immobilized** onto activated **microarray** slides of the invention (e.g. aminosilane in toluene/PDITC-treated glass) by standard microarray printing techniques. The printing solution comprised oligonucleotides at. . .

L29 ANSWER 28 OF 80 USPATFULL
AN 2002:148656 USPATFULL
TI Compositions and methods for modulating TGF-beta signaling
IN Wang, Tongwen, Seattle, WA, UNITED STATES
PI US 2002076799 A1 20020620
AI US 2001-927738 A1 20010810 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US3561, filed on 11 Feb 2000, UNKNOWN
PRAI US 1999-119786P 19990211 (60)
DT Utility
FS APPLICATION
LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
CLMN Number of Claims: 43
ECL Exemplary Claim: 1
DRWN 45 Drawing Page(s)
LN.CNT 5961
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel compositions comprising a Smad protein and an isolated protein component of the proteasome-mediated degradation pathway. The invention also provides novel compositions comprising a Smad1 protein and a substrate for proteasome-mediated degradation. The invention also provides methods of screening for compounds that modulate the interaction between the proteins comprising these compositions. The invention also provides methods of screening for compounds that modulate the activity of the proteins comprising these compositions. The invention also provides methods of detecting proteasome-mediated

degradation of novel Smad interacting proteins. A further aspect of the invention is a kit for detecting proteasome-mediated degradation of novel Smad interacting proteins. The invention also provides methods of treating diseases which are associated with aberrant levels of activity of a TGF-.beta. superfamily member.

DETD . . . art (Sambrook et al, 1988, supra; Ausubel et al., 1989, supra). The specific conditions given below are for hybridization using **oligonucleotide probes** less than or equal to **70 nucleotides** long and **DNA immobilized** on nylon **membrane**. One of skill in the art may readily adapt these conditions for use with probes longer than 70 nt, for. . .

L29 ANSWER 44 OF 80 USPATFULL

AN 2002:22075 USPATFULL

TI AUTOMATED HYBRIDIZATION/IMAGING DEVICE FOR FLUORESCENT MULTIPLEX DNA SEQUENCING

IN WEISS, ROBERT B., SALT LAKE CITY, UT, UNITED STATES
KIMBALL, ALVIN W., SALT LAKE CITY, UT, UNITED STATES
GESTELAND, RAYMOND F., SALT LAKE CITY, UT, UNITED STATES
FERGUSON, F. MARK, SALT LAKES CITY, UT, UNITED STATES
DUNN, DIANE M., WEST VALLEY CIT, UT, UNITED STATES
DI SERA, LEONARD J., SALT LAKE CITY, UT, UNITED STATES
CHERRY, JOSHUA L., SALT LAKE CITY, UT, UNITED STATES

PI US 2002012910 A1 20020131

AI US 1995-563462 A1 19951128 (8)

RLI Division of Ser. No. US 1993-141234, filed on 22 Oct 1993, GRANTED, Pat. No. US 5470710

DT Utility

FS APPLICATION

LREP ALAN J HOWARTH, PO BOX 1909, SANDY, UT, 84091

CLMN Number of Claims: 82

ECL Exemplary Claim: 1

DRWN 8 Drawing Page(s)

LN.CNT 1487

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for automated multiplex sequencing of DNA with an integrated automated imaging hybridization chamber system. This system comprises an hybridization chamber device for mounting a membrane containing size-fractionated multiplex sequencing reaction products, apparatus for fluid delivery to the chamber device, imaging apparatus for light delivery to the membrane and image recording of fluorescence emanating from the membrane while in the chamber device, and programmable controller apparatus for controlling operation of the system. The multiplex reaction products are hybridized with a probe, then an enzyme (such as alkaline phosphatase) is bound to a binding moiety on the probe, and a fluorogenic substrate (such as a benzothiazole derivative) is introduced into the chamber device by the fluid delivery apparatus. The enzyme converts the fluorogenic substrate into a fluorescent product which, when illuminated in the chamber device with a beam of light from the imaging apparatus, excites fluorescence of the fluorescent product to produce a pattern of hybridization. The pattern of hybridization is imaged by a CCD camera component of the imaging apparatus to obtain a series of digital signals. These signals are converted by the controller apparatus into a string of nucleotides corresponding to the nucleotide sequence an automated sequence reader. The method and apparatus are also applicable to other membrane-based applications such as colony and plaque hybridization and Southern, Northern, and Western blots.

DRWD [0033] FIG. 6 shows the detection limit of a **membrane-bound 75-mer oligonucleotide** in a single direct transfer electrophoresis sequence band wherein the 75-mer

oligonucleotide was probed with a complementary 25-mer oligonucleotide labeled. . .

DRWD [0034] FIG. 7 shows the detection limit of a **membrane-bound 75-mer oligonucleotide** in a single direct transfer electrophoresis sequence band wherein the 75-mer oligonucleotide was labeled directly with a single 5' biotin. . .

L29 ANSWER 65 OF 80 USPATFULL
AN 2000:31201 USPATFULL
TI Method for detection of non-denatured nucleic acid fragments
IN Ebersole, Richard C., Wilmington, DE, United States
Hendrickson, Edwin R., Hockessin, DE, United States
Payne, Mark S., Wilmington, DE, United States
Fitzpatrick-McElligott, Sandra, Rose Valley, PA, United States
Majarian, William R., Mt. Royal, NJ, United States
Rafalski, Jan A., Wilmington, DE, United States
PA E. I. du Pont de Nemours and Company, Wimington, DE, United States (U.S. corporation)
PI US 6037127 20000314
AI US 1997-979269 19971126 (8)
RLI Continuation-in-part of Ser. No. US 1997-863265, filed on 27 May 1997, now abandoned which is a continuation of Ser. No. US 1995-530795, filed on 20 Sep 1995, now abandoned which is a continuation of Ser. No. US 1994-221769, filed on 31 Mar 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Horlick, Kenneth R.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 20 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 2367
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for detecting the presence of a nucleic acid analyte in a test sample is provided in which a test sample is contacted with a test strip of a chromatographic bibulous porous material which is capable of moving the test sample laterally along the test strip by capillary migration to ultimate capture by a moiety in a specific capture zone.
DETD Three single-stranded **probes** ranging in size from 45-**57 nucleotides** in length were irreversibly **immobilized** to nitrocellulose **membranes** at three capture zones using ultraviolet irradiation of 1.5 Joules/cm.sup.2.
DETD . . . [SEQ ID NO: 24]
VE1862: 5'-CATACCTTCTGGTGCTAGAG-3' [SEQ ID NO: 25]
[2] Probe immobilized for hybridization on membrane to
VEE target **DNA**:
5'-TAATCCTGTAGGCAGAGAACTCTATACTCATCCCCCAGAA-3'
[SEQ ID NO: 26]
[3] **Probe immobilized** on **membrane** to **99 base** target **DNA**
(**57 mer**)
5' ACA GCA CCA CAG ACC ACG CAA CTC TAG AGG ATC CCG
GGT ACT GTT TGT CTT CCT GCC. . .

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(FILE 'HOME' ENTERED AT 10:07:01 ON 09 OCT 2002)

FILE 'MEDLINE, CAPLUS' ENTERED AT 10:07:08 ON 09 OCT 2002

FILE 'MEDLINE' ENTERED AT 10:07:35 ON 09 OCT 2002
L1 13 S JEFF!